WHAT IS CLAIMED IS

1. An apparatus for forming an image, in which hardware resources for use in the forming of images are provided, and one or more processes run based on programs in respect of the forming of images, said apparatus comprising:

an off-line unit which puts said one or more processes in a off-line state in which restriction is placed on the running of said one or more processes;

a memory area releasing unit which releases one or more memory areas used by said one or more processes that are put in the off-line state; and

a data laying-out unit which lays out data in said one or more memory areas released by said memory area releasing unit.

2. The apparatus as claimed in claim 1, wherein said data laying-out unit prompts said off-line unit to put said one or more processes in the off-line state as preparation for laying out the data in said one or more memory areas.

3. The apparatus as claimed in claim 2, wherein said data laying-out unit prompts said memory area releasing unit to release said one or more memory areas used by said one or more processes that are put in the off-line state, after said off-line unit puts said one or more processes in the off-line state.

4. The apparatus as claimed in claim 1, wherein said off-line unit sends an off-line-shift request to said one or more processes for putting said one or more processes to the off-line state.

5. The apparatus as claimed in claim 4, wherein said off-line unit notifies said data laying-out unit whether said one or more processes are in the off-line state, upon receiving a response from said one or more processes responding to the off-line-shift request.

6. The apparatus as claimed in claim 5, wherein said off-line unit notifies said data laying-out unit that said one or more processes are in the off-line state, after all said one or more processes having received the off-line-shift request shift to the off-line state.

7. The apparatus as claimed in claim 5, wherein said off-line unit notifies said data

laying-out unit that said one or more processes did not shift to the off-line state, after a notice indicating inability to shift to the off-line state is received from said one or more processes having received the off-line-shift request.

8. The apparatus as claimed in claim 5, wherein said off-line unit notifies said data laying-out unit that said one or more processes did not shift to the off-line state, after waiting for a response from all of said processes having received the off-line-shift request, even when a notice indicating inability to shift to the off-line state is received from one or more of said processes having received the off-line-shift request.

9. The apparatus as claimed in claim 5, wherein said off-line unit notifies said data laying-out unit that said one or more processes did

not shift to the off-line state, after a notice indicating inability to shift to the off-line state is received from one of said one or more processes having received the off-line-shift request, without waiting for a response from others of said one or more processes having received the off-line-shift request.

10. The apparatus as claimed in claim 4, wherein said off-line unit measures a time lapse from the sending of the off-line-shift request to said one or more processes, and notifies said data laying-out unit that said one or more processes are in the off-line state after a predetermined length of the time lapse even if no response to the off-line-shift request is received from said one or more processes.

11. The apparatus as claimed in claim 1,

wherein said one or more processes are allowed to run without said restriction after said off-line unit cancels the off-line state.

12. The apparatus as claimed in claim 1, wherein said restriction involves preventing an action by said one or more processes responding to a request from another process.

13. The apparatus as claimed in claim 12, wherein said one or more processes having shifted to the off-line state registers the request from another process.

14. The apparatus as claimed in claim 1, further comprising a process terminating unit which

terminates said one or more processes having shifted to the off-line state.

15. The apparatus as claimed in claim 14, wherein said process terminating unit terminates said one or more processes in a predetermined order.

16. The apparatus as claimed in claim 15, wherein said order is defined according to priority assigned to each of said one or more processes.

17. The apparatus as claimed in claim 15, wherein said order is defined according to size of memory areas allocated to the one or more respective processes.

18. The apparatus as claimed in claim 15, wherein said order is defined according to position of memory areas allocated to the one or more respective processes.

19. The apparatus as claimed in claim 14, wherein said memory area releasing unit releases memory areas that are no longer used after said process terminating unit terminates said one or more processes.

20. The apparatus as claimed in claim 19, wherein said memory area releasing unit releases the memory areas according to size of said data that is to be laid out.

21. The apparatus as claimed in claim 1, wherein said memory area releasing unit notifies said data laying-out unit of completion of releasing of the one or more memory areas after releasing the one or more memory areas.

22. The apparatus as claimed in claim 1, wherein the data laid out by said data laying-out unit is an updating program for updating at least one of the programs, and said data laying-out unit obtains the updating program through data communication.

23. The apparatus as claimed in claim 22, further comprising a program updating unit which updates at least one of the programs in response to

a program updating start request sent from said data laying-out unit.

24. The apparatus as claimed in claim 23, further comprising an input unit which is used to operate said apparatus, and said program updating unit invalidates said input unit when updating at least one of the programs.

25. The apparatus as claimed in claim 23, wherein said program updating unit reboots said apparatus after completing the updating of at least one of the programs.

26. The apparatus as claimed in claim 23, wherein said program updating unit notifies a device

of status of the program updating, said device communicating with said apparatus.

27. The apparatus as claimed in claim 26, wherein said program updating unit notifies of the status of the program updating by use of a process that has shifted to the off-lien state.

28. The apparatus as claimed in claim 1, wherein said one or more memory areas are outside control of an operating system that controls the running of said one or more programs and the hardware resources.

29. A method of acquiring one or more memory areas in an image forming apparatus, in which

hardware resources for use in the forming of images are provided, and one or more processes run based on programs in respect of the forming of images, the running of the programs and the hardware resources being controlled by an operating system, said method comprising:

an off-line step of putting said one or more processes in a off-line state in which restriction is placed on the running of said one or more processes;

a memory area releasing step of releasing one or more memory areas used by said one or more processes that are put in the off-line state; and

a data laying-out step of laying out data in said one or more memory areas released by said memory area releasing step.

30. The method as claimed in claim 29, further comprising a process terminating step of terminating said one or more processes having shifted to the off-line state.

31. The method as claimed in claim 29, wherein the data laid out by said data laying-out step is an updating program for updating at least one of the programs.